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TI Silver catalyst for ethylene oxide production
IN Nojiri, Naohiro; Sakai, Yukio
PA Mitsui Petrochemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
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PI JP--61071838	A2	19860412	1984JP-0191733	19840914
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AB A porous refractory support is impregnated with amine chelating agents, salts of Ag, Na, Cs, and Ba and metal halides (excluding iodides) and heated 1-30 min at 150-250.degree. to give catalysts for manuf. of ethylene oxide (I). Thus, heating 248 g AgNO3 and 148 g K2C2O4.H2O in 2 L water at 60.degree., filtering the ppt., washing the ppt., mixing the ppt. with 0.2 L water contg. 79.1 g ethylenediamine and 21.7 mL 1,3-propanediamine, 40 mL water contg. 0.22 g Ba(NO3)2 and 0.234 g CsCl, and 1 kg Al2O3 (surface area 0.5 m2/g, pore vol. 0.4 mL/g, preimpregnated with 26.9 g Na2CO3), evapg. at 100 mmHg, heating at 200.degree. for 10 min in air flowing at 2 m/s, and crushing gave a catalyst (particle size 4-9 mesh) contg. 13.5% Ag, 0.4% Na, 100 ppm Ba, 158 ppm Cs, and 42 ppm Cl. A gas mixt. contg. 30 vol.% C2H4, 8 vol.% O, 2 ppm CH2:CHCl, and the balance N was passed over 5 mL above-prepd. catalyst at 1.8 kg/cm2 g, 215.degree., and space velocity 4000 h-1 to give I at O conversion 40% and I selectivity 81.6% after 1 wk.

IT 74-85-1, reactions
(epoxidn. of, catalysts for)